



## Speed of opening, stability, descent rate

Inspection certificate number: **EP\_367.2024**

**Test Report**

### Manufacturer data

Manufacturer name: **Apco Aviation Ltd**  
 Representative: **Mr. Cohn Jonathan**  
 Street: **Chalamish 7, Caesarea Industrial park**  
 Post code / Place: **3088900 Caesarea**  
 Country: **Israel**

### Sample data

Name: **Square** Size: **140**  
 Steerable <sup>(1)</sup>: **No** Maximum weight in flight <sup>(2)</sup> [kg]: **140**  
 Weight <sup>(3)</sup> [kg]: **1.72** Volume packed [cm<sup>3</sup>]: **4800**  
 Serial number: **335244**

### Test results <sup>(4)</sup>

	Test no. 1	Test no. 2
Measured opening time [s]:	<b>3.91</b>	<b>3.81</b>

#### Unsteerable parachute and steerable parachute with locked controls (if applicable)

Measured sink rate [m/s] (≤ 5.5):	<b>5.1</b>	<b>5.25</b>
Stability test:	<b>Stable</b>	<b>Stable</b>

#### Steerable parachute and steerable parachute with unlocked controls (if applicable)

Measured sink rate [m/s] (≤ 4.0):	<b>n/a</b>	<b>n/a</b>
Stability test:	<b>n/a</b>	<b>n/a</b>
Test of steerability:	<b>n/a</b>	<b>n/a</b>

### Test data

	Test no. 1	Test no. 2
Place of test	<b>Villeneuve</b>	<b>Villeneuve</b>
Date of test	<b>14.08.2024</b>	<b>04.12.2024</b>
Atmosphere AGL		
[°C]	<b>23</b>	<b>5</b>
RH [%]	<b>71</b>	<b>79</b>
[hPa]	<b>965</b>	<b>979</b>
Wind [m/s]	<b>0.4</b>	<b>0.4</b>
Corrected mass with uncertainty (m <sub>corr</sub> ) [kg]:	<b>130.5</b>	<b>140.1</b>

#### If steerable with brake lock system

Place of test	<b>n/a</b>	<b>n/a</b>
Date of test	<b>n/a</b>	<b>n/a</b>
Atmosphere AGL		
[°C]	<b>n/a</b>	<b>n/a</b>
RH [%]	<b>n/a</b>	<b>n/a</b>
[hPa]	<b>n/a</b>	<b>n/a</b>
Wind [m/s]	<b>n/a</b>	<b>n/a</b>
Corrected mass with uncertainty (m <sub>corr</sub> ) [kg]:	<b>n/a</b>	<b>n/a</b>

## Strength test - 40 m/s opening shock

Inspection certificate number: **EP\_367.2024****Test Report**

### Manufacturer data

Manufacturer name: **Apco Aviation Ltd**  
 Representative: **Mr. Cohn Jonathan**  
 Street: **Chalamish 7, Caesarea Industrial park**  
 Post code / Place: **3088900 Caesarea**  
 Country: **Israel**

### Sample data

Name:	<b>Square</b>	Size:	<b>140</b>
Steerable	<b>No</b>	Maximum weight [kg]:	<b>140</b>
Weight [kg]	<b>1.72</b>	Volume packed [cm <sup>3</sup> ]:	<b>4800</b>
Serial number:	<b>335245</b>		

### Test data <sup>(1)</sup>

	Test no. 1	Test no. 2
Place of test	<b>St-Cierges</b>	<b>St-Cierges</b>
Date of test	<b>30.07.2024</b>	<b>30.07.2024</b>
Maximum weight [kg]	<b>140</b>	<b>140</b>
Inspector:	<b>Claude Thurnheer</b>	<b>Claude Thurnheer</b>

### Atmosphere AGL

[°C]	<b>22</b>	<b>30</b>
RH [%]	<b>64</b>	<b>47</b>
[hPa]	<b>945</b>	<b>951</b>
Wind [m/s]	<b>0.2</b>	<b>0.3</b>

### Test results

	Test no. 1	Test no. 2
Strength test (40m/s shock)	<b>POSITIVE</b>	<b>POSITIVE</b>
Aircraft speed uncertainty K=2 [m/s] <sup>(2)</sup>	<b>2.9</b>	<b>2.9</b>



Identification number: **MISC\_107.2019**

**Apco Aviation Ltd Inner Mayday Square one size**

**Result summary**

Inner container strength test. Applied minimum 700 N for at least 10 seconds and at maximum strength.

Duration at the required strength: **13.2 [s]**

The maximum strength before broken: **785.0 [N]**

Place of declaration **Villeneuve**  
Date of issue: **15.02.2019**  
Managing director **Alain Zoller**

Signature:

This signature approve the validity of the test report, and can be included in the inspection certificate 71.5.1

**Air Turquoise SA** has thoroughly tested the sample of riser/bridle mentioned above and certifies its conformity with the standards: **EN 12491: 2015 chapter 5.3.2 and LTF NfL 91/09 chapter 6.1.8**

Instrument	Validity	Manufacturer	Type no.	S/N
Load Cell (axial)	01.06.2021	Burster GmbH (DE)	8431-10000	1185483
Winch	check every 12 month	Arwin	300/600	N/A
Geos n° 11 Skywatch	08.05.2017	JDC elec.	Geos n° 11	22

<sup>(1)</sup> Inner container: container of the folded emergency parachute.

<sup>(2)</sup> Inner container (the connection between handgrip and inner container) is loaded at min 700 [N] over 10 seconds. The deployment system is loaded until breaking. Each component is tested.

<sup>(3)</sup> Calculated value include the value minus the uncertainty (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The value of the measured lies within the assigned range of values with a probability of 95%.

Identification number: **MISC\_291.2024**

**Apco Aviation Ltd MayDay bridle**

### Result summary

Maximum strength for riser, bridle: **24330.7 [N]**  
Duration at the requested load: **1.3 [s]**

Place of declaration: **Villeneuve**  
Date of issue: **26.11.2024**  
Managing director: **Andrea Wigger**

Signature:



This signature approves the validity of the test report

Air Turquoise SA has thoroughly tested the sample of emergency parachute mentioned above and certifies its conformity with the standards: EN 1651:2018+A1:2020<sup>(1)</sup> and NF L 2-565-20 chapter 6.1.4

Instrument	Validity	Manufacturer	Type no.	S/N
Load sensor	23.08.2028	HBM	1-S9M/50KN-1	31314652
Geos n° 11 Skywatch	18.06.2025	JDC elec.	Geos n° 11	22

<sup>(1)</sup> Riser: lowest part of the the parachute system, which is connected to the harness. Bridle: connection between risers and harness, can also be a strap.

<sup>(2)</sup> The connecting strap has to have a minimum load capacity of 24000 [N]. The exposed part of the connecting belt has to be protected against environmental factors.

<sup>(3)</sup> Calculated value includes the value minus the uncertainty (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The value of the measured lies within the assigned range of values with a probability of 95%.

<sup>(4)</sup> This standards is NOT covered by accreditation D-IS-19457-01